Sinus Tumors

- Bighorn sheep sinus tumors are an infectious disease that causes thickening of the sinus lining or solid masses in the upper respiratory sinuses.

Species Affected in Colorado
- Rocky Mountain bighorn sheep
- Desert bighorn sheep
- California bighorn sheep
- Mountain goats

What to Look For
- Thickened lining of the sinuses of the skull and horns.
- Solid masses filling the sinus cavities.
- Masses may be soft and gelatinous, hard and bony, or both.
- Masses invade bone and may cause horn or facial abnormalities.
- Thick nasal exudates, especially with concurrent bacterial infections.

Cause and Transmission
The cause of bighorn sheep sinus tumors remains unknown, although experimental transmission of the disease suggests an infectious, likely viral, etiology. Sinus tumors appear to prevent normal clearance of pathogens from the upper respiratory tract, enhancing carriage (and likely shedding) of other pathogens including Mycoplasma ovipneumoniae and Pasteurellaceae. Colorado herds that struggle with recurrent lamb pneumonia often have particularly high occurrence of sinus tumors in adults, and presence of tumors may enhance spread of pneumonia-causing bacteria to lambs. Experimental transmission of sinus tumors to domestic sheep has been demonstrated.

References


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